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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,485	01/17/2002	Yunjie Ding	21572-12	7293
22895 75	590 11/04/2003		EXAMI	NER
	S INOUYE P S		PARSA, J.	AFAR F
810 3RD AVEI SUITE 258	NUE		ART UNIT	PAPER NUMBER
SEATTLE, W.	A 98104		1621	1-
		·	DATE MAILED: 11/04/2003	· P

Please find below and/or attached an Office communication concerning this application or proceeding.

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پ.و س		Application No.	Applicant(s)			
		10/052,485	DING ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Jafar Parsa	1621			
Period fo	The MAILING DATE of this communication app or Reply	pears on the c ver sheet with the o	correspondence address			
A SH THE I - Exter after - If the - If NC - Failu - Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. a period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from t, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. (1) (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on 17 J	lanuary 2002 .				
2a) <u></u> ☐	This action is FINAL . 2b)⊠ Th	is action is non-final.				
3) <u> </u>	Since this application is in condition for allowationsed in accordance with the practice under ion of Claims					
4)⊠	Claim(s) 1-12 is/are pending in the application	1.				
	4a) Of the above claim(s) <u>8-12</u> is/are withdrawr	n from consideration.				
5)[
6)⊠	Claim(s) 1-7 is/are rejected.					
7)	Claim(s) is/are objected to.					
•	Claim(s) are subject to restriction and/o	r election requirement.				
Applicati	ion Papers					
,	The specification is objected to by the Examine	•				
10) 🗌 🤈	The drawing(s) filed on is/are: a)□ accep	·				
	Applicant may not request that any objection to the		, -			
11) 🔲	The proposed drawing correction filed on		oved by the Examiner.			
40\□∶	If approved, corrected drawings are required in rep	•				
-	The oath or declaration is objected to by the Ex	aminer.				
	under 35 U.S.C. §§ 119 and 120					
	(3) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
.a)	☐ All b)☐ Some * c)☐ None of:					
	Certified copies of the priority documents					
	2. Certified copies of the priority documents	s have been received in Applicat	ion No			
* 5	3. Copies of the certified copies of the prior application from the International Bu See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	-			
	Acknowledgment is made of a claim for domesti	•				
_a) The translation of the foreign language pro Acknowledgment is made of a claim for domesti	ovisional application has been rec	ceived.			
Attachmen		. ,				
2) 🔲 Notic	ce of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)		y (PTO-413) Paper No(s) Patent Application (PTO-152)			

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Information Disclosure Statement

1. The information disclosure filed on September 30, 2002 has not been considered. Applicants need to provide a copy of each reference cited in US PTO-1449 to be considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wittenbrink et al (USPN 6,296,757) in view of O'Rear (USPN 6,369,286) or Sapienza et al (USPN 4,460,710).

Wittenbrink teaches a process for preparing a clean distillate fuel heavier than gasoline, e.g., useful as a diesel fuel having a cetane number of at least 60 and more preferably about 74 is produced by non-shifting Fischer-Tropsch process. See abstract and summary of the invention. Non-shifting Fischer Tropsch operates at relatively low CO

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partial pressure and temperature of 175-225 C; using catalyst comprising cobalt or ruthenium as the primary Fischer-Tropsch agent (co/.5, lines 31-44). By virtue of using Fischer-Tropsch process, the recovered distillate has nil sulfur and nitrogen and the diesel material contains at least 95% paraffin's; the ratio of iso/normal is bout 0.3 to 3.0 and contains less than 2% unsaturated olefins (col. 3, lines 50-60 and col. 4, lines 36-38). Oxygen is present primarily as C12+ linear alcohol (col. 5, lines 20-22).

The difference between Wittenbrink and the claimed invention is that the instant claims require an activated carbon as a Fischer-Tropsch support. However, Sapienza teaches various support such as, activated carbon, silica, alumina and titanium suitable for Fischer-Tropsch reaction to produce diesel distillate (see col. 2, lines 30-38). O'Rear also teaches suitable support include, for example, silica, alumina, activated carbon and etc. on cobalt catalyst for preparing distillate fuel (see abstract and col. 16, lines 12-16).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to substitute one support for another as taught by Sapienza or Wittenbrink with the expectation of producing diesel distillate with high cetane number.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jafar Parsa whose telephone number is (703)308-4615. The examiner can normally be reached on 8 a.m.-4:30 p.m. (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (703)308-4532. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1235.

> **Primary Examiner** Art Unit 1621

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